**AMENDMENTS TO THE CLAIMS**

1: Canceled.

2. (Previously Presented) The device as in claim 79, wherein the fluorescent layer comprises a phosphor material.

3. (Original) The device as in claim 2, wherein the phosphor material comprises nanoscale phosphor grains.

4. (Original) The device as in claim 2, wherein the phosphor material absorbs excitation light at an ultra violet wavelength.

5. (Original) The device as in claim 2, wherein the phosphor material absorbs excitation light at a violet wavelength.

6. (Original) The device as in claim 2, wherein the phosphor material absorbs excitation light at a wavelength less than 420 nm.

7. (Original) The device as in claim 2, wherein the fluorescent layer comprises a non-phosphor fluorescent material.

8. (Original) The device as in claim 7, wherein the fluorescent material comprises quantum dots.

9. (Original) The device as in claim 7, wherein the non-phosphor fluorescent material absorbs excitation light at an ultra violet wavelength.

10. (Original) The device as in claim 7, wherein the non-phosphor fluorescent material absorbs excitation light at a violet wavelength.

11. (Original) The device as in claim 7, wherein the non-phosphor fluorescent material absorbs excitation light at a wavelength less than 420 nm.

12. (Previously Presented) The device as in claim 79, wherein the fluorescent layer comprises a plurality of different of fluorescent materials which absorb the excitation light to emit light at different visible wavelengths.

13. (Original) The device as in claim 12, wherein the fluorescent layer is patterned into parallel stripes, and wherein at least two adjacent stripes have at least two different fluorescent materials that emit light at two different visible wavelengths, respectively.

Claim 14: Canceled.

15. (Previously Presented) The device as in claim 79, wherein the Fresnel lens is in a telecentric configuration for the incident excitation light.

16. Canceled.

17. (Previously Presented) The device as in claim 79, wherein the first layer is a multi-layer interference filter.

Claims 18-20: Canceled.

21. (Previously Presented) The device as in claim 79, wherein the fluorescent layer comprises a plurality of parallel phosphor stripes, wherein at least three adjacent phosphor stripes are made of three different phosphors: a first phosphor to absorb the excitation light to emit light of a first color, a second phosphor to absorb the excitation light to emit light of a second color, and a third phosphor to absorb the excitation light to emit light of a third color.

22. (Original) The device as in claim 21, wherein the phosphors absorb excitation light at an ultraviolet wavelength.

23. (Original) The device as in claim 21, wherein the phosphors absorb excitation light at a violet wavelength.

24. (Original) The device as in claim 21, wherein the phosphors absorb excitation light at a wavelength less than 420 nm.

Claims 25-28: Canceled

29. (Previously Presented) The device as in claim 21, further comprising:

a first optical absorbent material mixed in the first phosphor that absorbs light of the second and third colors and transmits light of the first color;

a second optical absorbent material mixed in the second phosphor that absorbs light of the first and third colors and transmits light of the second color; and

a third optical absorbent material mixed in the third phosphor that absorbs light of the first and second colors and transmits light of the third color.

30. Canceled.

31. Canceled.

32. (Currently Amended) The device as in claim **79** [16], wherein the dielectric layers are polymeric materials.

33. (Previously Presented) The device as in claim **79** [16], wherein the dielectric layers are polyester materials.

34. (Previously Presented) The device as in claim 79, wherein the fluorescent layer is patterned to have different fluorescent regions with different fluorescence materials.

35. (Original) The device as claim 34, wherein the fluorescent layer is patterned to further comprise non-fluorescent regions without a fluorescent material to directly display light of the optical excitation beam.

36. (Original) The device as in claim 34, wherein the screen further comprises:

a second layer on a second side of the fluorescent layer to transmit the visible light and to block the excitation light; and

a contrast enhancing layer formed over the second layer to comprise a plurality different filtering regions that spatially match the fluorescent regions, wherein each filtering region transmits light of a color that is emitted by a corresponding matching fluorescent region and blocks light of other colors.

37. (Original) The device as in claim 34, wherein each fluorescent region includes a boundary that is optically reflective.

38. (Original) The device as in claim 34, wherein each fluorescent region includes a boundary that is optically absorbent.

39. Canceled.

40. Canceled.

41. (Previously Presented) The device as in claim 79, wherein the fluorescent layer comprises a plurality of parallel fluorescent stripes, each fluorescent stripe to absorb the excitation light to emit light of a designated color,

the device further comprising:

a contrast enhancing layer positioned relative to the fluorescent layer so that the fluorescent layer is placed at a position between the contrast enhancing layer and the first layer,

wherein the contrast enhancing layer comprises a plurality of different filtering stripes that spatially match the fluorescent stripes, where each filtering stripe transmits light of a color that is emitted by a corresponding matching fluorescent stripe and blocks light of other colors.

42. (Previously Presented) The device as in claim 79, wherein the laser module comprises a modulation control which combines a pulse code modulation and a pulse width modulation to modulate the laser beam to produce image grey scales.

43. Canceled.

44. (Previously Presented) The device as in claim 79, wherein the optical module includes:

diode lasers respectively producing laser beams of the excitation light onto the screen;

a scanning module to scan the laser beams onto the screen to display the image;

a mechanism to monitor image data bits to be modulated on the laser beam to produce a black pixel monitor signal; and

a laser control coupled to receive the black pixel monitor signal and operable to operate each diode laser at a driving current below a laser threshold current without turning off the driving current to produce a virtue black color on the screen when the black pixel monitor signal indicates a length of black pixels is less than a threshold and turn off the driving current to produce a true black color on the screen when the black pixel monitor signal indicates a length of black pixels is greater than a threshold.

45. (Previously Presented) The device as in claim 79, wherein the optical module includes:

a polygon having reflective facets to rotate around a first rotation axis to scan each beam on the screen in a direction perpendicular to the first rotation axis;

a scanning mirror to pivot around a second rotation axis perpendicular to the first rotation axis to scan each beam on the screen in a direction parallel to the first rotation axis; and

a beam adjustment mechanism operable to change at least one of a position and a beam pointing of each beam along the first rotation axis to control a position of each beam on the screen along the first rotation axis.

Claims 46-78: Canceled.

79. (Currently Amended) A display device, comprising:

a display screen comprising a fluorescent layer that absorbs excitation light to emit visible light **of different colors**, a first layer on a first side of the fluorescent layer operable to

transmit the excitation light and to reflect the visible light, and a Fresnel lens formed on the first side of the fluorescent layer to direct the excitation light incident to the display screen at different angles **at different locations to enter the fluorescent layer with entry directions being approximately normal** to the fluorescent layer, wherein the first layer comprises a composite sheet of a plurality of dielectric layers **that are coextruded to have alternating high and low refractive indices to form an optical interference filter;**

an optical module operable to produce scanning beams of the excitation light that scan across the display screen and positioned to direct the scanning beams of the excitation light to enter the display screen to reach the fluorescent layer, each scanning beam carrying optical pulses that carry information **of different colors** on **a colored image to be generated by the emitted visible light of different colors by the fluorescent layer** ~~an image to be displayed~~;

an optical sensing unit positioned to receive a portion of light from the screen **that is different in wavelength from the excitation light of the scanning beams from the optical module** and operable to produce a monitor signal indicating a spatial alignment of each scanning beam on the screen; and

a feedback control mechanism operable to receive the monitor signal and to control the optical module to adjust a timing of the optical pulses carried by each scanning beam in response to the monitor signal to correct a spatial alignment error of the scanning beam on the display screen indicated by the monitor signal.

80. Canceled.

81. (Original) The device as in claim 79, wherein the fluorescent layer comprises a plurality of parallel phosphor stripes spaced from one another.

82. Canceled.

83. (Original) The device as in claim 79, wherein the dielectric layers are polymeric materials.

84. (Original) The device as in claim 79, wherein the dielectric layers are polyester materials.

85. (Original) The device as in claim 79, wherein the fluorescent layer comprises different fluorescent regions that emit light of different colors, and a boundary of two adjacent different fluorescent regions is either optically reflective or optical absorbent.

86. (Original) The device as in claim 79, wherein the screen further comprises a second layer on a second side of the fluorescent layer to transmit visible light and to block the excitation light.

87. (Original) The device as in claim 86, wherein the second layer comprises a composite sheet of a plurality of dielectric layers.

Claims 88-90: Canceled.

91. (Currently Amended) A display device, comprising:

a display screen comprising a fluorescent layer that absorbs excitation light to emit visible light **of different colors**, a first layer on a first side of the fluorescent layer operable to transmit the excitation light and to reflect the visible light, and a Fresnel lens formed on the first side of the fluorescent layer to direct the excitation light incident to the display screen at different angles **at different locations to enter the fluorescent layer with entry directions being approximately normal** to the fluorescent layer, wherein the first layer comprises a composite sheet of a plurality of dielectric layers **that are coextruded to have alternating high and low refractive indices to form an optical interference filter**;

an array of lasers operable to produce laser beams of the excitation light, each laser beam carrying optical pulses that carry information **of different colors** on **a colored image to be generated by the emitted visible light of different colors by the fluorescent layer** ~~an image to be displayed~~;

a scanning module positioned to receive the laser beams from the lasers and to scan the

laser beams across the display screen to enter the display screen to reach the fluorescent layer;

~~**a first reflector and a second reflector positioned to direct the scanning laser beams from the scanning module to the display screen in a folded optical path; and**~~

**an optical sensing unit positioned to receive a portion of light from the screen that is different in wavelength from the excitation light of the laser beams and operable to produce a feedback control signal indicating a spatial alignment of each scanning laser beam on the screen; and**

a feedback control mechanism operable to control directions of the scanning laser beams from the scanning module to adjust a timing of the optical pulses carried by each scanning laser beam, in response to [a] **the** feedback control signal ~~**indicating a spatial alignment of the scanning laser beam on the display screen**~~, to correct an error in the spatial alignment.

92. (Previously Presented) The device as in claim 91, wherein the fluorescent layer comprises different of fluorescent materials which absorb the excitation light to emit light at different visible wavelengths.

93. (Previously Presented) The device as in claim 91, wherein the fluorescent layer is patterned into parallel stripes, and wherein at least two adjacent stripes have at least two different fluorescent materials that emit light at two different visible wavelengths, respectively.

94. (New) The device as in claim 91, wherein:

the array of lasers are an array of diode lasers, and

the device further comprises:

a mechanism to monitor image data bits to be modulated on each laser beam to produce a black pixel monitor signal; and

a laser control coupled to receive the black pixel monitor signal and operable to operate each diode laser at a driving current below a laser threshold current without turning off the driving current to produce a virtue black color on the screen when the black pixel monitor signal indicates a length of black pixels is less than a threshold and turn off the driving current to

produce a true black color on the screen when the black pixel monitor signal indicates a length of black pixels is greater than a threshold.

95. (New) The device as in claim 91, wherein the fluorescent layer comprises a plurality of parallel phosphor stripes, wherein at least three adjacent phosphor stripes are made of three different phosphors: a first phosphor to absorb the excitation light to emit light of a first color, a second phosphor to absorb the excitation light to emit light of a second color, and a third phosphor to absorb the excitation light to emit light of a third color.

96. (New) The device as in claim 95, further comprising:

a first optical absorbent material mixed in the first phosphor that absorbs light of the second and third colors and transmits light of the first color;

a second optical absorbent material mixed in the second phosphor that absorbs light of the first and third colors and transmits light of the second color; and

a third optical absorbent material mixed in the third phosphor that absorbs light of the first and second colors and transmits light of the third color.

97. (New) The device as in claim 91, wherein:

the fluorescent layer of the display screen comprises a plurality of parallel fluorescent stripes, two adjacent fluorescent stripes to absorb the excitation light to emit light of two different colors, and

the display screen comprises a contrast enhancing layer positioned relative to the fluorescent layer so that the fluorescent layer is placed at a position between the contrast enhancing layer and the first layer, wherein the contrast enhancing layer includes a plurality of different filtering stripes that spatially match the fluorescent stripes and each filtering stripe transmits light of a color that is emitted by a corresponding matching fluorescent stripe and blocks light of other colors.

98. (New) The device as in claim 91, comprising:

a modulation control which combines a pulse code modulation and a pulse width modulation to modulate each laser beam to produce image grey scales.

99. (New) The device as in claim 91, comprising:

a first reflector and a second reflector positioned in an optical path of the scanning laser beams between the display screen and the scanning module and configured to direct the scanning laser beams from the scanning module to the display screen in a folded optical path.

100. (New) The device as in claim 91, wherein:

the optical sensing unit positioned to receive the portion of light from the screen that is different in wavelength from the excitation light of the laser beams includes one or more optical detectors that receive the visible light of different color emitted by the fluorescent layer.

101. (New) The device as in claim 79, wherein:

the optical sensing unit positioned to receive the portion of light from the screen that is different in wavelength from the excitation light of the laser beams includes one or more optical detectors that receive the visible light of different color emitted by the fluorescent layer.